

5(3)

SOV/79-29-4-35/77

AUTHORS: Yakhontov, L. N., Rubtsov, M. V.

TITLE: Synthesis of the Derivatives of Py-N-benzyltetrahydronorgarmine-3-carboxylic Acid (Sintez proizvodnykh Py-N-benziltetragidronorgarmin-3-karbonovoy kisloty)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 4, pp 1201-1206 (USSR)

ABSTRACT: The esters and amides of the above acid are of importance as intermediate products for the synthesis of reserpine analogues; however, no description has as yet been given because of the difficulties encountered in preparing them (except in reference 1). The general method developed by the authors at an earlier date for the reduction of "garmine" derivatives by means of sodium boron hydride resulting in the Py-tetrahydrogarmine derivatives rendered possible the preparation of the ethyl ester (XII) and N-methylanilide (X) of Py-N-benzyltetrahydronorgarmine-3-carboxylic acid (Scheme), starting from Py-N-chlorobenzylate of norgarmine-3-carboxylic acid (VII) or its betaine (VI) via the ethyl ester (XI) and N-methylanilide (VIII). Because of the difficulties encountered the previous synthesis of the above chlorobenzylate (Ref 3) was replaced by the following method: Com-

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Synthesis of the Derivatives of Py-N-benzyltetrahydronorgarmine-3-carboxylic Acid

pound (IV) was obtained from garmine (I) by two alternative methods; either garmine was changed into (III) by reaction with benzaldehyde, and (III) was heated for 13 hours at 160° with benzylchloride in a benzyl alcohol medium; or, in the second process, "garmine" was transformed, with benzyl chloride, into compound (II) which was slightly heated with benzaldehyde in the presence of pyridine. The quantities of the Py-N-chlorobenzylate of 3-styrylnorgarmine obtained amounted to 46 and 58.8%, respectively (details in the experimental part). During the oxidation of the Py-N-chlorobenzylate of 3-styrylnorgarmine with potassium permanganate the betaine of Py-N-benzylnorgarmine-3-carboxylic acid forms. It was suggested generally to synthesize the amides of norgarmine-3-carboxylic acid by the reaction with amines and phosphorus oxychloride at 160-170°. There are 3 references, 2 of which are Soviet.

ASSOCIATION:

Card 2/3₂

Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze (All-Union Scientific Chemico-pharmaceutical Research Institute imeni S. Ordzhonikidze)

5(3)

AUTHORS:

Yakhontov, L. N., Rubtsov, M. V.

SOV/79-29-7-51/83

TITLE:

Aminoacids of the Quinuclidine Series
(Aminokisloty ryada khinuklidina)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, PP 2343-2348 (USSR)

ABSTRACT:

No data on the synthesis and biological activity of the above-mentioned acids is given in publications. The following amino acids were synthesized in this investigation: α -Aminomethyl- β -(quinuclidyl-2)-propionic acid (III), β -(quinuclidyl-2)- β -aminopropionic acid (VII), and 3-aminoquinuclidine-2-carboxylic acid (XII). (I) was used as an initial compound for the preparation of (III) (Ref 2) (Scheme 1). The Knoevenagel condensation of the aldehyde (I) gave (II) in quantitative yield. The hydrogenation of the double bond and the cyano group in (II) was effected with the Pt catalyst according to Adams and was a one-step reaction. The obtained esters of acid (III) was saponified without previous isolation. (IV) was used for the preparation of (VII) (Scheme 2). The Claisen condensation of (IV) with ethyl acetate (Ref 3) gave the sodium derivative [enol form(V)]. (V) dissolved in water only within 24 hours, yielding the sodium salt of β -(quinuclidyl-2)- β -ketopropionic

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Aminoacids of the Quinuclidine Series

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acid after hydrolysis. The oxime (VI) of this keto acid was prepared by the reaction of the sodium salt of the acid with an equimolar amount of hydroxylamine hydrochloride in absolute alcohol. (VI) was converted to (VII) by the Adams reduction. The synthesis of (XII) was carried out as shown in scheme 3. Against all expectations only one diastereo-isomer of each of the three aminoacids synthesized was obtained, instead of the three theoretically possible isomers. There are 4 references, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All-Union Scientific Chemico-pharmaceutical Research Institute imeni S. Ordzhonikidze)

SUBMITTED: May 15, 1958

Card 2/2

RUBTSOV, M.V.; MIKHLINA, Ye.Ye.; YAKHONTOV, L.N.

Chemistry of quinuclidine derivatives. Usp.khim. 29
no.1:74-105 Ja '60. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevti-
cheskiy institut imeni S. Ordzhonikidze.
(Quinuclidine)

5.3610

77882

SOV/79-30-2-33/78

AUTHORS:

Yakhontov, L. N., Mastafanova, L. I., Rubtsov, M. V.

TITLE:

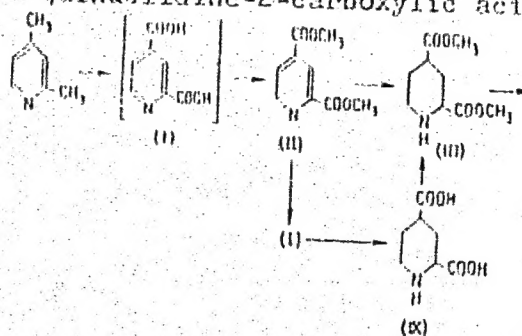
Synthesis of 5-Substituted Quinolindine-2-Carboxylic Acid Based on 2,4-Lutidine

PERIODICAL:

Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 519-525 (USSR)

ABSTRACT:

5-Substituted quinuclidine-2-carboxylic acid was prepared.

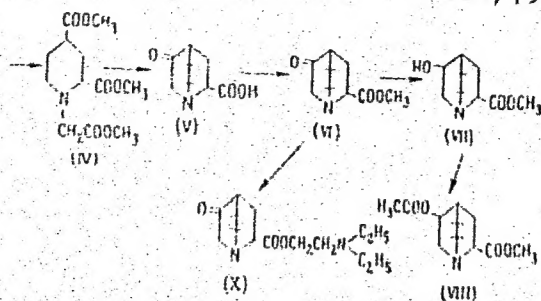


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Synthesis of 5-Substituted Quinolidine-
-2-Carboxylic Acid Based on 2,4-Lutidine

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The preparation of several compounds and some of their properties are given.

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Nr	Starting material	Obtained product	Yield in %	mp
1	Technical 2,4-lutidine + + H ₂ O + KMnO ₄	II	24.85	57.5-58.5
2	2,4-lutidine + formalin + + HNO ₃	II	56.5	57.5-58.5
3	2,4-pyridinedicarboxylic acid + HCl + hydrogenation over Pt	IX	89.7	224-226
4	dimethyl ester of 2,4-pyridi- nedicarboxylic acid + HCl + + methanol + Hydrogenation over Pt	III	84	151.5-152
5	corresponding 2,5-product was obtained in the same way		100	199.5-200

(Cont'd on Card 4/5)

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(Table cont'd)

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Nr	Starting material	Obtained product	Yield in, %	mp
6	III + methyl bromoacetate + K_2CO_3	IV	56.2	bp 137-138 0.5 mm pr n_D^{20} 1.4717
7	anhydrous methanol + K + + IV	VI	61.2	bp 113-114 0.5 mm pr n_D^{20} 1.4848
8	VI + HCl	V	89.7	260 (dec)
9	diethylaminoethanol + sodium ethoxide + V	X	32.8	bp 162-165 2.5 mm pr n_D^{20} 1.4830

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(Cont'd on Card 5/5)

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Nr	Starting material	Obtained product	Yield in %	mp
10	VI + anhydrous methanol + + hydrogenation over Pt	VII	100	bp 135/0.3 mm n_D^{20} 1.5042
11	VII + acetic anhydride	VIII	50.6	bp 120/3 mm

There are 9 references, 1 Soviet, 3 German, 3 U.S., 1 U.K., 1 French. The 4 U.S. and U.K. references are: U.S. pat. 2456377 (1948); L. H. Sternbach, S. Kaiser, J. Am. Chem. Soc., 74, 2215 (1952); G. R. Clemco, T. P. Metcalfe, J. Chem. Soc., 1989 (1937); T. O. Soine, J. Am. Pharm. Ass., 33, 223 (1944).

ASSOCIATION:

Ordzhonikidze All State-Scientific-Research Chemical-Pharmaceutical Institute (Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze)

SUBMITTED:

February 2, 1959

Card 5/5

YAKHONTOV, L.N.; RUBTSOV, M.V.

Synthesis of 3(α -diethylaminoethyl)4-methylpyridine. Zhur.ob.
khim. 30 no.5:1507-1515 My '60. (MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S.Ordzhonikidze.
(Pyridine)

YAKHONTOV, L.N.; RUBISOV, M.V.

7-Azaindole derivatives. New type of closure of the pyrroline ring
in the reaction of trichlorocollidine with secondary amines. Zhur.
ob.khim. 30 no.10:3300-3306 0 '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S.Ordzhonikidze.
(Pyridine) (Cyclization)

YAKHONTOV, I.N.; KRASNOKUTSKAYA, D.M.; RUBTSOV, M.V.

Synthesis and some conversions of 1-phenyl-1-oxy-2-methoxy-
methylcyclohexane. Zhur.ob.khim. 31 no.10:3190-3197 0 '61.

(MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S.Ordzhonikidze.

(Benzene)

YAKHONTOV, L.N.; RUBTSOV, M.V.

Derivatives of 7-azaindole. Part 2: Synthesis of 1-substituted
4-methyl-7-azaindoline in the reaction of 2-chloro-3-(-chloroethyl)-
4-methylpyridine with secondary amines. Zhur.ob.khim. 31 no.10:
3281-3287 0 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S.Ordzhonikidze.
(Pyridine)

YAKHONTOV, L.N.; RUBTSOV, M.V.

Derivatives of 7-azaindole. Part 3: Formation of 7-azaindolines during the reaction of secondary amines with hydroxyhalo derivatives of pyridine. Zhur.ob.khim. 32 no.2:432-436 F '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Pyridine) (Azaindole)

BERENFEL'D, V.M.; YAKHONTOV, L.N.; YANBUKHTIN, N.A.; KRASNOKUTSKAYA, D.M.;
YATSENKO, S.V.; RUBTSOV, M.V.

Synthesis of substituted 4-(β -diethylamino- α -methylbutylamino)
2-styrylquinolines. Zhur.ob.khim. 32 no.7:2169-2177 J1 '62.
(MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S.Ordzhonikidze.
(Quinoline)

YAKHONTOV, L. M.:

Organic Chemistry

Dissertation: "Investigation of the Series of Derivatives of Quinuclidine." Cand Chem Sci, All-Union Sci Res Chemicopharmaceutical Inst imeni Sergo Ordzhonikidze (UNIKhFI), 18 Mar 54 (Vechernyaya Moskva, Moscow, 8 Mar 54)

SO: SUM 213, 20 Sept 1954

YAKHONTOV, L.N.; BELOVA, O.I.; CHUMBURIDZE, B.I.

Fifth Congress of the Pharmaceutical Society of the German
Democratic Republic. Aptech. delo 12, no. 3: 78-81. My-Je '63
(MIRA 17:2)

RUBTSOV, M.V.; YAKHONTOV, L.N.; MASTAFANOVA, L.L.

Nuclear magnetic resonance in the study of allyl rearrangement of
3-hydroxy-3-vinylquinuclidine. Zhur.ob.khim. 33 no.4:1180-1189
Ap '63. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S.Ordzhonikidze.
(Quinuclidine—Spectra) (Allyl compounds—Spectra)
(Substitution (Chemistry))

YAKHONTOV, L.N.; MASTAFANOVA, L.I.; RUBTSOV, M.V.

Wittig reaction used in the synthesis of 3-substituted quinuclidines. Zhur.ob.khim. 33 no.10:3211-3214 0 '63.
(MIRA 16:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Otdzhonikidze.

YAKHONTOV, L.N.; RUBTSOV, M.V.

Derivatives of 7-azaindole. Part 4: Reaction of trichlorocollidine and dichlorohydroxycollidine with fatty-aromatic amines. Zhur.ob.khim. 34 no.2:493-499 F '64. (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.

YAKHONTOV, L.N.; URITSKAYA, M.Ya.; RUBTSOV, M.V.

Derivatives of 7-azaindole. Part 6: Synthesis of
4-methyl-7-azaindole and its 6-chloro, 6-iodo, and
6-methoxy derivatives. Zhur. ob. khim. 34 no. 5:1449-1455
My '64.

Derivatives of 7-azaindole. Part 7: Dehydrogenation of
indoline and 7-azaindoline derivatives with sodium in
liquid ammonia. Ibid.:1456-1458 (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S.Ordzhonikidze.

RUBTSOV, M.V.; YAKHONTOV, L.N.; KRASNOKUTSKAYA, D.M.

Synthesis and some transformations of 1-(pyridyl-2'-methyl)
-1-hydroxy-2-methoxymethylcyclohexane. Zhur. ob. khim. 34
no.8:2610-2617 Ag '64. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut im. S. Ordzhonikidze.

YAKHONTOV, L.N.; URITSKAYA, M.Ya.; RUBTSOV, M.V.

Derivatives of 7-azaindole. Parts 14-16. Zhur. org. khim. 1
no.11:2029-2046 N '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S. Ordzhonikidze. Submitted July 20, 1964.

RUBTSOV, M.V.; YAKHONTOV, L.N.; MIKHLINA, Ye.Ye.

Hofmann degradation of 1,4-bis(pentamethylene) piperazinium
dichloride by means of a methanol solution of caustic potash.
Zhur. ob. khim. 35 no.4:621 Ap '65.

(MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevti-
cheskiy institut imeni S. Ordzhonikidze.

YAKHONTOV, L.N.; MASTAFANOVA, L.I.; PORTNOVA, S.L.; RUBTSOV, M.V.

Synthesis of 3-vinylquinuclidine. Dokl. AN SSSR 162 no.5:1075-1078
Je '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut im. S.Ordzhonikidze. Submitted November 2, 1964.

LIBMAN, S.S., doktor biol. nauk; YAKHATOV, L.F., kand. khim. nauk

Hypotensive preparations. Zhur. VIKHO 10 no. 6:616-629 '65
(MIRA 19:1)

ACC NR: AP6024397

SOURCE CODE: UR/0020/66/169/002/0361/0364

AUTHOR: Yakhontov, I. N.; Pronina, Ye. V.; Rubtsov, M. V.; Kazanskiy, B. A.
(Academician)

ORG: All-Union Chemical and Pharmaceutical Scientific Research Institute
(Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im.
S. Ordzhonikidze)

TITLE: Anomalous course of the Fischer reaction

SOURCE: AN SSSR. Doklady, v. 169, no. 2, 1966, 361-364

TOPIC TAGS: benzpyrindoastriazone, Fischer reaction, *CYCLIC COMPOUND,*
CYCLOHEXANONE, CHEMICAL REACTION

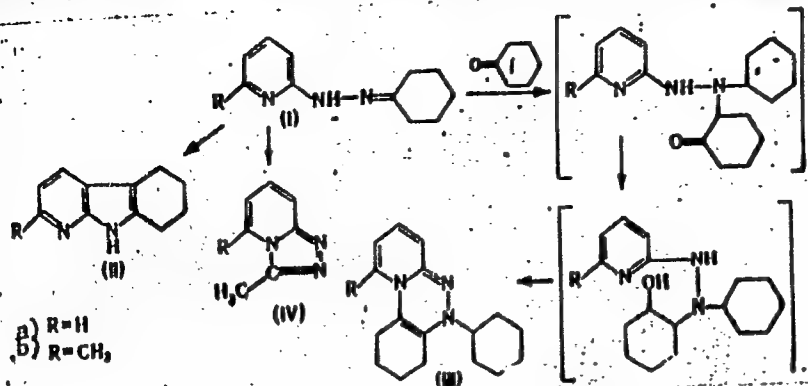
ABSTRACT:

It was found that in boiling HCl, the reaction of Ia with cyclohexanone, in addition to the normally formed IIa, also yielded (36.6%, based on cyclohexanone) the previously unreported tricyclic compound IIIa, mp 77-78°C, i.e., under certain conditions the Fischer reaction proceeds anomalously. The cyclization proceeds via a partial hydrolysis of Ia

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UDC: 547.873

ACC NR: AP6024397



to form cyclohexanone, which adds at the C=N double bond of the hydrazine Ia, with subsequent enolization of the ketone and elimination of H₂O. Under the same conditions, Ib reacts with cyclohexanone to form IIIb in 27.6% yield, mp 107—108°C. Orig. art. has: 1 formula. [W.A. 50; CBE No. 10]

SUB CODE: 07/ SUBM DATE: 16Nov65/ ORIG REF: 002/ OTH REF: 008/

Card 2/2

YAKHONTOV, L.V.

Economic geography of Balykchinskiy District, Issyk-Kul' Province.
Uch. zap. Geog. fak. Kir. un. no. 1:98-102 '55. (MLBA 10:2)
(Balykchinskiy District Economic geography)

GUZHIN, Georgiy Semenovich; YAKHONTOV, Leonid Valeriyevich;
KARTAVOV, M.M., red.; BEYSHENOV, A., tekhn. red.

[Around the Issyk-Kul'; popular geographical study]Vokrug
ozera Issyk-Kul'; populiarnyi geograficheskii ocherk. Frunze,
Kirgizskoe gos. izd-vo, 1959. 67 p. (MIRA 15:11)
(Issyk-Kul' region--Economic geography)

YAKOVLEV, M.

Construction industry base in Vladivostok. Zhil stroi.
no.6:10-12 Jo '61. (MEM 14:7)

1. Zamostitel' nachal'nika Gruzvostokstroya.
(Vladivostok-Building materials)

YAKHONTOV, M.V.; TOROPOV, Ye.V.; IVANOV, A.D.

Causes of the pulsation in blast furnace air preheaters. Stal'
23 no.9:778-781 S '63. (MIRA 16:10)

1. Magnitogorskiy metallurgicheskiy kombinat.

YAKHONTOV, N.Ye. (g. Gor'kiy, ul. Lyadova, d.51, kv. 11)

Experience with the implantation of radiovobalt in the treatment of cancer of the lower lip. Vop.onk. 5 no.3:376-379 '59. (MIRA 12:12)

1. Iz Gorkovskogo oblastnogo onkologicheskogo dispansera (glavnyy vrach - zasluzhennyy vrach RSFSR T.V. Pavlova, nauchnyy rukovoditel' - prof. A.I. Kozhevnikov) i kafedry rentgenologii i radiologii (zav. - dots. V.F. Sigachev) Gor'kovskogo meditsinskogo instituta im. S.M. Kirova (dir. - dots. N.N. Mizinov).

(COBALT, radioactive,

ther. of cancer of lip, implantation (Rus))

(LIPS, neoplasms,

ther., radiocobalt, implantation (Rus))

YAKHONTOV, N. Ye., Cand Med Sci -- "On the combined therapy
of cancer of the lower lip." Gor'kiy, 1961. (Gor'kiy State
Med Inst im S. M. Kirov) (KL, 8-61, 266)

- 550 -

YAKHONTOV, N.Ye.; YUMATOVA, N.A.

Hemangioendothelioma of the stomach. Khirurgiia no.11:132-133
'61. (MIRA 14:12)

1. Iz Gor'kovskogo oblastnogo onkologicheskogo dispansera.
(glavnyy vrach - zagluzhennyi vrach RSFSR T.V. Pavlova) i kafedry
obshchey khirurgii (zav. - prof. A.I. Kozhevnikov) Gor'kovskogo
meditsinskogo instituta.
(STOMACH--CANCER) (ENDOTHELIUM)

YAKHONTOV, N.Ye.; YUMATOVA, N.A.

Malignant adenoma of the breast in a 6-year-old girl. Vop.
onk. 7 no.3:84-86 '61. (MIRA 14:5)
(BREST—CANCER)

1. YAKHONTOV, P.
2. USSR (600)
4. Water-Supply Engineering - Apparatus and Supplies
7. Potentialities for increasing the productivity of water-supply equipment.
Zhil. -kon. khoz. 2, No. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

YAKHONTOV, I.

CA

12

Preparation of Swiss cheese from pasteurized milk. P.
Yakhontov. *Molochayskaya Prom.* 12, No. 12, 13-15 (1951).—
G. M. Kosolapoff
Directions are given.

1. YAKHONTOV, P.
2. USSR (600)
4. Cheese
7. Improving consistency of coarse cheese, Mol. prom., 13, No. 11, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

YAKHOMTOV, S.A., inzh.

Estimating the resistance of a flashy stream in the
zone of small relative depths. Gidr. stroi. 30 no.6:40-43
Je '60. (MIRA 13:7)

(Hydraulics)

YAKHONTOV, S.A., kand.tekhn.nauk

Determining the coefficient of hydraulic friction for flows over
very rough surfaces. Gidr. stroi. 32 no.8:38-39 Ag '62.
(MIRA 15:9)

(Hydraulics)

YAKHONTOV, S.A.

"An Investigation of an Even Turbulent Stream Under Rough
Topographic Conditions."

dissertation for the degree of Candidate of Technical Sciences
(awarded by the Timiryazev Agricultural Academy, 1962)

(Izvestiya Timiryazevskoy Sel'skokhozyaystvennoy Akademii, Moscow, No. 2,
1963, pp 232-236)

YAKHONTOV, S.A., kand.tekhn.nauk

Boundary layer on a rough surface. Izv. vys. ucheb. zav.; energ.
6 no.7:81-88 J1 '63. (MIRA 16:8)

1. Moskovskiy ordena Lenina energeticheskiy institut. Predstavlena
kafedroy gidravliki.

(Fluid dynamics)

YAKHONTOV, S. Ye.

"Glottokhronologiya i kitayskotibetskaya sem'ya yazykov."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,
Moscow, 3-10 Aug 64.

YAKHONTOV, V., prof. (Tashkent); YEREMENKO, T. (Tashkent); BOGOLYUBOVA, A.
(Tashkent)

Entomophages of the apple and cherry ermine moths *Hyponomeuta*
malinellus L. and *Hyponomeuta padellus*. Zashch. rast. ot vred.
1 bol. 10 no.8:53-54 '65. (MIRA 18:11)

YAKHONTOV, V., prof. (Tashkent)

Book reviews and bibliography. Zashch. rast. ot vred. 1 bol. 10
no.2:60 '65. (MIRA 18:4)

YAKHONTOV, V., prof. (Tashkent)

Hungarian Institute of Plant Protection. Zashch. rast. ot vred.
i bol. 10 no.5:57 '65. (MIRA 18:6)

YAKHONTOV, V.D.

Passage of aquatic game birds in the middle course of the Kolyma
River [with summary in English]. Zool.zhur. 36 no.3:462-464 Mr '57.
(MLRA 10:5)

1. Zyryanskiy krayevedcheskiy muzey Yakutskoy ASSR.
(Kolyma Valley--Water birds)

1. YAKHONTOV, V. D.
2. USSR (600)
4. Birds - Kolyma River Valley
7. Birds rare to Kolyma. Priroda 41 No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

YAKHONTOV, V.D. (Khabarovsk)

Swallows in Yakutia. Priroda 52 no.4:114-115 '63.

(MIRA 16:4)

(Kolyma Valley--Swallows)

SECRET

UR 1342145-004 072 0000/0060

AUTHOR: Yakimontov, V. (Professor, Tashkent,

TITLE: A useful book

SOURCE: Zashchita rasteniy ot vreditel'ey i bolezney, no. 2, 1965, 60

TO: 10 T. 001. Insect research, insect. biology research, soil

1. The Tashkent branch of the All-Union Scientific Center for the Study of the Biology of Insects and the Tashkent branch of the Institute of Zoology and Botany of the Academy of Sciences of the Uzbek SSR published a symposium on the protection of plants from insects and diseases. The symposium was held in Tashkent in 1965. The results of the symposium are presented in the book "Zashchita rasteniy ot vreditel'ey i bolezney" (Protection of plants from insects and diseases), no. 2, 1965, 60.

NO REF SOV: 000

OTHER: 000

1ST AND 2ND EIGHTS																										3RD AND 4TH EIGHTS																									
COMMON ELEMENTS													COMMON ELEMENTS													COMMON ELEMENTS													COMMON ELEMENTS												
<p><i>CA</i></p> <p>The corrosion of aluminum in chemical media. V. D. Yakhontov. <i>J. Chem. Ind. (U. S. S. R.)</i> 17, No. 9, 39-42(1940).—Al is stable in solns. of pH 4-10. Of stronger acids, HCl is more corrosive than H_2SO_4 or HNO_3. The presence of $KMnO_4$ or $K_2Cr_2O_7$ may hasten corrosion by oxidizing action, but sometimes a protective coating of $Al(OH)_3$ is formed. Impure Al is more easily corroded than pure Al. H. M. Leicester</p>																																																			
<p>ASM-AIA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

Action of organic acids on metals. V. D. Yakhontov, *J. Applied Chem. (U.S.S.R.)* 19, 761-72 (1946) (In Russian).—Corrosion was investigated on Fe (C 0.15, Mn 0.25, S 0.05, P 0.01), Al (Fe 0.27, Si 0.14, C 0.02), Cu 0.25, S 0.05, P 0.01), Pb (Fe 0.01, Cu 0.008, Fe 0.04, As 0.03, Sb traces), Pb (Fe 0.01, Cu 0.008, Bi 0.03, Sb 0.06), Sn (Sb 0.08, Cu 0.055, Pb 0.13, Fe 0.03, Sb 0.06), mainly by the loss-of-wt. method (in 24-hr. runs), in stirred solns. in an amt. of acid corresponding to 0 ml./sq. cm. Acids belonging to different series differ widely in their action on Fe and on Cu at equal degrees of ionization or at equal pH. Within the normal aliphatic acid series, at equal concn., the corrosive action on a given metal decreases from C₁ to C₁₀; the loss of wt. w with a given acid decreases mostly in the order Pb, Fe, Sn, Cu. Al. Examples: at 18°, Fe. 0.1 N HCOOH, $w = 1.650, 1.200$; C₁₁H₂₃COOH, C₁₂H₂₅COOH, C₁₃H₂₇COOH, $w = 1.050, 1.000, 1.000, 1.016, 0.820$ g./sq. m./hr.; 0.1 N C₁₁H₂₃COOH, Pb, Fe, Sn, Cu, Al, $w = 3.020, 1.000, 0.012, 0.0175, 0.014$. The variation of w does not follow strictly the decrease in the ionization const., the w -decreasing effect of increasing chain length outweighing that of disson.; HCOOH has a stronger corrosive effect (than) might be expected from its disson. const. In the diatomic acid series, (COOH)₂, COOH.C₁₁H₂₃COOH, COOH.(CH₂)₈.COOH, the action on Fe and Pb increases from C₁ to C₈;

at 15°, is max. with C_4 at 60°; on Sn, corrosion is max. with C_4 at both 15° and 60°; on Cu and Al, the action decreases from C_4 to C_1 ; example of data: 0.1 N $COOH$: $C_{1H_3}COOH$, Pb, Fe, Sn, Cu, Al at 15°, $w = 1.560$, 0.450, 0.880, 0.087, 0.025 g./sq. m./hr.; at 60°, $w = 3.99$, 2.10, 2.23, 0.454, 0.280. With increasing concn. of the acid, w increases, mostly along an S-shaped curve starting with a steep rise of w , a very nearly horizontal portion, and another steep rise, example, citric and tartaric acids on Fe, at 18°, with an inflection at about 60-70% acid; however, for $C_{1H_3}COOH$ on Fe and Pb, $AcOH$ on Mg, the variation of w with concn. is very

nearly linear; AcOH on Al at 75° has a min. at about 55%, a max. at 55°, followed by a fall; HCOOH and AcOH on Fe, HCOOH and AcOH on Pb, at room temp., show an initial fall of corrosion with rising concn., a min. (at about 3% on Fe, 5-10% on Pb), and subsequent steady rise. In still immersion, w is considerably lower than in stirred soln., and the results coincide with those of the acid exch. method. Up to about 60% for most of the acids except H_2SO_4 , 10% for tartaric and citric acids, 30% for lactic acid, $w = \frac{1}{1+a+b}$, where c = concn. of the acid; for $\text{HCl}, \text{CH}_3\text{COOH}, \text{C}_6\text{H}_5\text{COOH}, \text{COOH}(\text{CH}_3), \text{COOH}(\text{CH}_2\text{CH}_3), \text{CH}_3\text{CHOHCOOH}$, tartaric and citric acid, $a = 0.089, 0.0, 0.210, 0.087, 0.110, 0.213, b = 0.028, 0.070, 0.428, 0.068, 0.042, 0.075$. In most cases, $\log w$ is proportional to the abs. temp. Corrosion of Fe by fatty acids is most intense during the very first sec., as was ascertained by photo-electrically, with KFe(CN); the rate falls to $1/4$ after 1 min., becomes practically const. after 10 min. and then remains const. up to 200 hrs.

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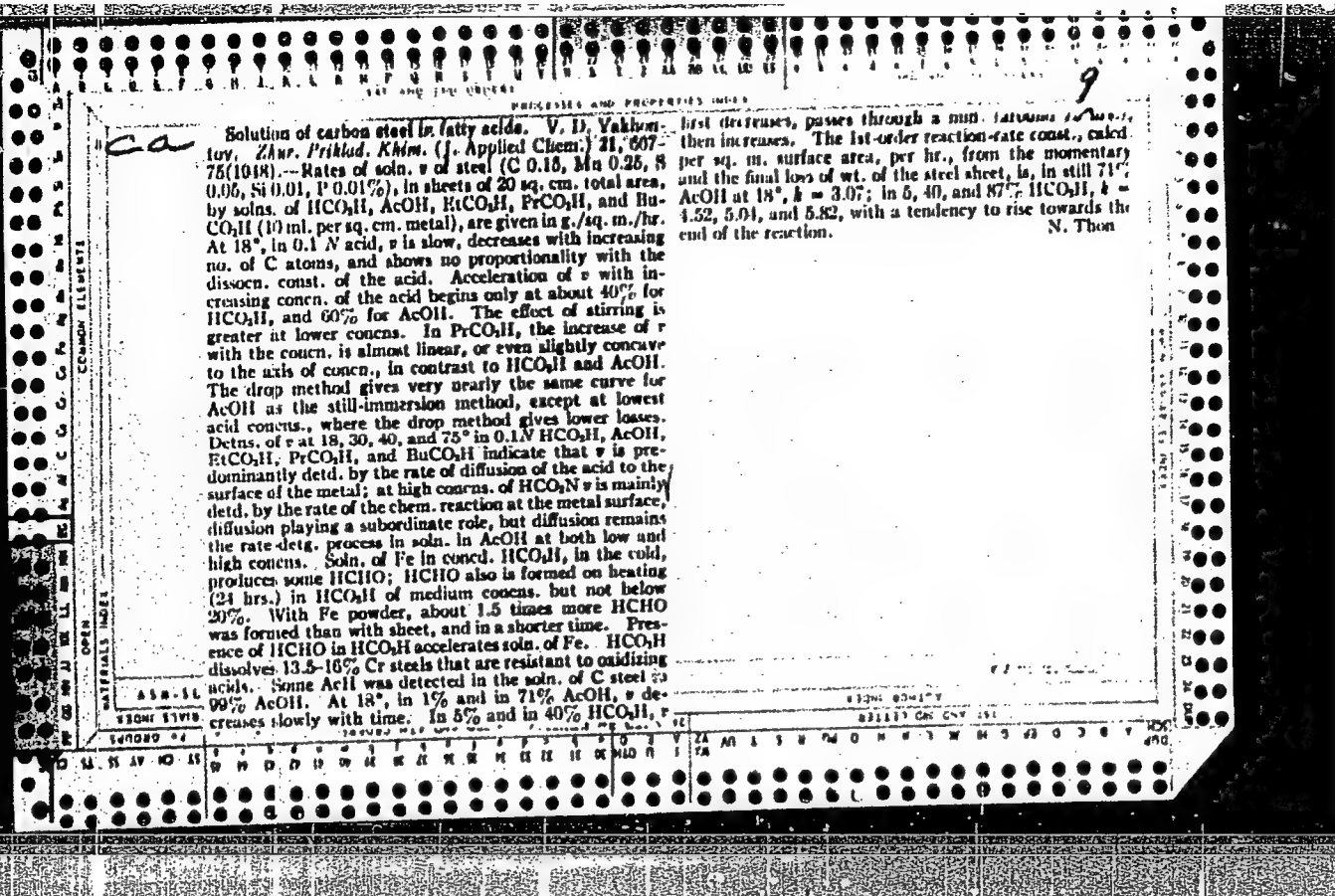
Potentials of technical metals in organic acids. V. D. Yakubovskiy (Leningrad Hydrometeorol. Inst.). *J. Gen. Chem.* (U. S. S. R.) 17, 635-41 (1947) (in Russian).—The potentials E of steel (C 0.15, Mn 0.25, S 0.05, P 0.01), Al (Fe 0.27, Si 0.14, Cu 0.02), Cu (Fe 0.01, As 0.03, Sb traces), Pb (Fe 0.01, Cu 0.008, Bi 0.03, Sb 0.06), and Sn (Sb 0.04, Cu 0.005, Pb 0.13, Fe 0.03, Bi 0.073%) were measured at 18° against a satd. calomel electrode in 0.1 N aq. solns. of the acids, immediately on immersion and after 30 min. (1) In the series HCOOH , AcOH , PrCOOH , BuCOOH , the E 's follow the order of the electrochem. series of the metals. With rising no. of C atoms, E tends to become somewhat nobler, e.g. Sn, E (final) = 502, 413, 418, 246 mv., resp.; the change of E in 30 min. indicates in most cases increased reaction between the metal and the acid, particularly in HCOOH , e.g. Al, E = 694 → 718 mv.; however, the opposite change occurs in individual cases, e.g.: Fe in HCOOH , E = 541 → 500 mv.; in AcOH , 547 → 501; Al in AcOH , 710 → 638; Sn in PrCOOH , 501 → 418 mv. (2) In the dibasic acid series COOH , $\text{COOH.CH}_2\text{CH}_2\text{COOH}$, $\text{COOH.CH}_2\text{CH}_2\text{CH}_2\text{COOH}$, the E still follows the order of the electrochem. series (N_2SO_4), while E falls with increasing no. of C atoms; Fe is an exception, with E (final) = 520, 540, 552 mv., resp. In (COOH), the reactivity of Fe decreases somewhat in 30 min. (E = 542 → 520) while that of Al increases (E = 686 → 721 mv.). The behavior of Fe in (COOH), is evidently linked with the formation of an insol. protective salt film; addn. of $\text{K}_2\text{C}_2\text{O}_4$, which forms the sol. complex $\text{K}_2\text{Fe}(\text{C}_2\text{O}_4)_2$, results in increased E throughout a period of

4
5 hrs., example: 0.1 N (COOH), and 0.1 N (COOH), + 2% $\text{K}_2\text{C}_2\text{O}_4$, 1, 3, 5 hrs., E = 605, 495, 475 and 630, 610, 600 mv. The increase of E with increasing concn. of the $\text{K}_2\text{C}_2\text{O}_4$ added to 0.1 N (COOH), is paralleled by increasing loss of wt.: at 60°, $\text{K}_2\text{C}_2\text{O}_4$ 0, 1, 4%, E (30 min.) = 621, 676, 624 mv., loss = 0.150, 0.251, 0.515 g./sq. m./hr. At 15° and at 60°, in (COOH), $\text{COOH.CH}_2\text{CH}_2\text{COOH}$, $\text{COOH.CH}_2\text{CH}_2\text{CH}_2\text{COOH}$, the loss of wt. of Fe was: 0.150, 0.456, 0.348, and 0.790, 2.150, 1.700 g./sq. m./hr., i.e. the order of reactivities with the two higher acids is reversed. The same is found with Pb: 0.012, 1.325, 2.130, and 0.062, 3.090, 3.280. As with Fe, addn. of $\text{K}_2\text{C}_2\text{O}_4$ to (COOH), raises E of Pb at all times, well above the E established in the two higher acids; example, $\text{K}_2\text{C}_2\text{O}_4$ added 0, 6, 10%, 60 and 180 min., E = 483, 636, 645 and 460, 624, 644 mv. This is due to soln. of the protective layer in the form of the sol. $\text{K}_2\text{Pb}(\text{C}_2\text{O}_4)_2$. With Sn, loss of wt. is max. in $\text{COOH.CH}_2\text{CH}_2\text{COOH}$. (3) From measurements in hydroxy acids, Sn has approx. the same E as Fe in malic acid; in 0.1 N tartaric acid, Sn is slightly anodic to Fe (after 30 min., Sn 541, Fe 530 mv.). This is reversed in lactic acid (Sn 528, Fe 540) and in citric acid (Sn 513, Fe 573). In lactic, tartaric and malic acids, Fe and Al have very close E ; in citric acid, Al 690, Fe 573 mv. In most hydroxy acids, corrosion of Al tends to diminish with time; this is reversed with Cu, Pb and, to a lesser degree, with Sn.

N. Thom

Ca
Peculiarities of reactions of some organic acids with technical metals. V. D. Yakhontov (Leningrad Hydrometeorol. Inst.). *J. Gen. Chem. (U.S.S.R.)* 17, 2054-7 (1947) (in Russian); cf. *C.A.* 41, 4423c; 42, 467b. — Aliphatic carboxylic acids react with common metals under certain conditions to give aldehydes, which act as depolarizers; thus at the cathodic regions of the metal 2 processes take place: $2H + \frac{1}{2}O_2 \rightarrow H_2O$ and $2H + RCO_2H \rightarrow RCHO + H_2O$. At low concn. the 1st process has greater significance; at higher concns. the 2nd reaction predominates. The strong action of aliphatic acids on metals, in spite of their low disocn. const., is accounted for by the depolarization. The following metals were used: steel (0.15% C, 0.25% Mn, 0.05% S, and 0.01% P), aluminum (0.25% Fe, 0.14% Si, 0.02% Cu), lead (0.01% Fe, 0.008% Cu, 0.03% Bi, 0.00% Sb), pure Zn and Mg, and 99.9% Cu. The acids were freshly recrystd. and distd. HCO_2H at all concns., starting with 1%, gives $HCHO$ in reaction with Mg (in 25 min. 100 ml. concd. HCO_2H generated 75 mg. $HCHO$). Zinc also gives $HCHO$ with HCO_2H in all concns., but reacts less vigorously than Mg (100 ml. of 40% acid gave in 1.5 hrs. 2 mg. $HCHO$; 60% acid gave 3.6 mg. at room temp.; heating on steam bath gave 22-28 mg. under the same conditions). Al and dil. HCO_2H do not give $HCHO$ at room temp., but heating concd. acid with Al gives detectable amt. of $HCHO$. Steel gives $HCHO$ with HCO_2H only at high acid concn. on heating, beginning with 20% acid; thus at 100° in 24 hrs. 20% acid gave 19.5 mg., 30% acid gave 22.6 mg., 50% acid gave 35.8 mg., 60% acid

gave 33.8 mg., 70% acid gave 31.5 mg., and 80% acid gave 31.5 mg.; at room temp. small amts. of $HCHO$ form only with acids of very high concn. $AcOH$ reacts most vigorously with Mg, giving AcH at all acid concns.; 30% $AcOH$ gave 33.8 mg. AcH in 1 hr.; 70% $AcOH$ gave 27.6 mg. AcH in 25 min. Zn also gives AcH but reacts less vigorously than Mg; AcH is formed at room temp. at high $AcOH$ concns. while at 100°, 100 ml. 10% $AcOH$ gave 0.7 mg. AcH , 60% $AcOH$ gave 10.8 mg. Steel reacts with $AcOH$ much more slowly, and only at 100° concn., with heating, is there a detectable amt. of AcH formed. Pb reacts with $AcOH$ giving AcH at room temp. at above 50% $AcOH$ concn. Cu and stainless steel do not give aldehydes with either HCO_2H or $AcOH$. $HCHO$ was detected on treatment of Mg or amalgamated Al with oxalic acid, while steel, Zn, Al, and Pb failed to give aldehydes. Mg and maleic acid (10-50% concn.) also gave detectable amts. of aldehyde; this reaction proceeded with evolution of H_2 .
G. M. Kosolapoff



YAKHONTOV, V. D.

Kinetics of the Reactions of Metals with Organic Acids I, page 1158, Sbornik
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Leningrad Hydrometeorological Inst

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U.S.S.R.

Kinetics of the reaction of metals with organic acids. I.
 V. D. Yakimov (Leningrad Hydrometall. Inst.).
 Dokl. Akad. Nauk S.S.S.R. 2, 1153-54 (1954).—Study of the soln. of steel, Sn, Pb, Al, and
 Cu in 0.1N HCO_2H , AcOH , and $\text{MeCH}_2\text{CO}_2\text{H}$ shows that
 soln. in the first seconds or minutes is usually rapid and
 then becomes const. or decreases slightly over a period of
 hrs. or days until the acid is spent. In special cases, as with
 steel or Cu and HCO_2H , the curve shows a min. or with Sn
 in AcOH it shows a max. II. *Ibid.*, 1165-71.—The reac-
 tion of metals with acids is unimol. The presence of im-
 purities in the metal or the formation of compds. such as
 CH_2O or complex salts in the soln. usually causes a slow rise
 in the rate const. calcd. by the equation for a 1-order re-
 action. A 2nd-order equation usually fits the observations
 better. The chem. reaction detg. the rate in such cases as
 soln. of Al and Cu in most org. acids, whereas the rate of
 diffusion from and to the metal surface is the detg. factor in
 such cases as soln. of Sn and Pb in many acids. In most
 cases, however, both factors are important, with diffusion
 slightly the more so. H. M. Leicester

YAKHONTOV, V.D. (Khabarovsk)

Merganser Mergus squamatus from the coastal area of the Sea of
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YAKHONTOV, Vsevolod Dmitriyevich; GUSSAKOVSKAYA, O.N., red.

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1. Professor for Syrovatko. 2. Of the Department of Obstetrics and
Gynecology of Stalingrad Medical Institute.

YAKHONTOV, V.V.

Bulgarian journal "Plant protection". Zashch.rast.ot vred.i bol.
7 no.5:62-63 My '62. (MIPA 15:11)
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Zashch. rast. ot vred. i bol. 8 no.8:59-60 Ag '63. (MIRA 16:10)

YAKHONTOV, V. V. PROF.

PA4OT62

USSR/Medicine - Zoology
Academy of Sciences

Jen 1946

"Uzbek Zoological Society of the Academy of Sciences, Uzbek SSR," Prof V. V. Yakhontov, 2 pp

"Priroda" No 1

Presents the history of the Uzbek Zoological Society which was begun, 15 Oct 1940, with a membership of 35 Tashkent zoologists. On 15 May 1945, there were 121 active members and two corresponding members. Lists the staff of the society, President is Prof V. V. Yakhontov, Dr of Biological Sciences. There were two meetings during 1940. Author presents a list of the more important articles submitted at those meetings. Also lists some of the articles submitted during the 1942 meetings. LC 4OT62

YAKHONTOV, V. V.

PA 21T84

USSR/Medicine -- Zoology
Medicine - Insects

Jan 1947

"New Type of Physopoda (Thysanoptera) from Trans-Caucasia," V.V. Yakhontov, 2 pp.

"Dok Ak Nauk SSSR" Vol LV, No 3

Discusses the Thrips cardui sp nov, discovered at Kirovabad (Azerbaydzhan). Submitted by K.I. Skryabin, 24 Jul 46.

21T84

YAKHONTOV, V.V.

29258 Novoye o meditsinskom znachenii pochely. Priroda, 1949, No 9, s. 66-67
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SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

BEDRINTSEV, K.N., kand.ekonom.nauk; KORZHENEVSKIY, N.L., doktor geograf. nauk; KOROVIN, Ye.P., doktor biolog.nauk; SHUVALOV, S.A., kand. geologo-mineral.nauk; YAKHONTOV, V.V., prof.; BELUZHEV, A.G.; GERKUZEN, S.Kh.; PAL'MIN, B.A.; KLEYNENBERG, G.Ye.; BARANOVSKIY, M.D.; DOROSHEV, N.T., mladshiy nauchnyy sotrudnik; SCHASTNEV, N.V.; TSAFENKO, N.G.; BARAKHODZHAYEV, A.Kh., red.; SUKHANOV, P.P., tekhn.red. (MIRA 13:7)

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1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut ekonomiki.
 2. Chlen-korrespondent AN Uzbekskoy SSR (for Korzhenevskiy).
 3. Deystvitel'nyy chlen AN Uzbekskoy SSR (for Korovin).
 4. Institut ekonomiki AN Uzbekskoy SSR (for Doroshev).
- (Uzbekistan--Economic conditions)

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Two new species of thrips (Thysanoptera) from Iran. Ent. ob. 31, No. 3-4, 1951

9. Monthly List of Russian Accessions, Library of Congress, September 195²₈, Unclassified.

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Name

Title of Work

Nominated by

Yakhontov, V. V.

"Pests of Agricultural
Plants and Products of
Central Asia and Their
Control."

Academy of Sciences
Uzbek SSR

80: W-30604, 7 July 1954

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Pests of agricultural plants and products of Central Asia and their control. Tashkent,
Gos. izd-vo UzSSR, 1953. 663 p.

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Material on thrips, a pest of dandelion plants in Uzbekistan. Zool.zhur. 32
no.5:903-914 S-0 '53. (MLA 6:10)

1. Kafedra entomologii Tashkentskogo sel'skokhozyaystvennogo instituta.
(Uzbekistan--Thrips) (Thrips--Uzbekistan)

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Methods of protecting farm plants from agricultural pests. Tashkent, Akademia
nauk UzSSR, 1954. 23 p. (Bibliotekha kolkhoznika)

YAKHONTOV, V. V.

Arthropodocoenosis of an alfalfa field in northern Uzbekistan.

1. Order Aranei - spiders. Zool.zhur. 34 no.2 Mr-Apr '55.

(MLRA 8:6)

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(Uzbekistan--Arthropoda)

YAKHONTOV, V.V.

Economic significance of cotton plant fauna. Zool.zhur. 3/4
no.5:1019-1030 S-O '55. (MLRA 9:1)

1. Akademiya nauk Uzbekskoy SSR i Tashkentskiy sel'skokho-
zyaystvennyy institut.
(Cotton--Diseases and pests)

USSR/ Agriculture - Insect pests

Card 1/1 Pub. 86 - 23/37

Authors : Yakhontov, V. V., Prof.

Title : New method for predicting the multiplication of plant lice

Periodical : Priroda 44/4, 110 - 111, Apr 1955

Abstract : An analysis is made of the conditions for multiplication of insects harmful to plant life of the type generally known as plant lice. It was found that the tendency to develop wings arises when the conditions for the existence of the insects are difficult. Experiments were conducted with even temperature and varying moisture, and with even moisture and varying temperature. Four references: 3 Soviet and 1 American (1927 - 1950).

Institution :

Submitted :

YAKHONTOV, V.V.; DAVLETSHINA, A.G.

Locusts of the ancient Amu Darya delta. Trudy Inst. zool. i paraz.
AN Uz. SSR 6:17-29 '56. (MLRA 10:6)
(Kunya--Urgench District--Locusts)

USSR / General and Special Zoology. Insects. System- P
atics and Faunistics.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 63924.

Author : Yakhontov, V. V.; Davletshina, A. G.
Inst : Institute of Zoology and Parasitology, AS UzSSR.
Title : The Species Composition of Darkling Beetles
(Tenebrionidae) in the Ancient Delta of Amu-Dar'ya.

Orig Pub: Tr. in-ta zool. i parazitol. AN UzSSR, 1956,
6, 31-38.

Abstract: An incomplete list of darkling beetles in north-
eastern Turkmen SSR.

Card 1/1

YAKHONTOV, V.V.

YAKHONTOV, V.V.

Studying the weevil species (Coleoptera, Curculionidae) of Bukhara
Province. Trudy Inst. zool. i paraz. AN Uz. SSR 6:39-42 '56.
(Bukhara Province--Weevils) (MIRA 10:6)

YAKHONTOV, V.V.

Literature on predatory larvae (Lepidoptera). Trudy Inst. zool. i
paraz. AN Uz. SSR 6:127-137. '56. (MLRA 10:6)
(Bibliography--Parasites--Insects)
(Parasites--Insects--Bibliography)

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Spiders (Aranei) of Uzbekistan. Dokl. AN Uz.SSR no.7:61-62 '56.
(MIRA 12:6)

1. Institut zoologii i parazitologii AN UzSSR. Predstavleno
akad. AN UzSSR S.S. Manashom.
(Uzbekistan--Spiders)

YAKHONTOV, V. V.

USSR/Special and General Zoology - Insects.

0-3

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 69818

Author : Yakhontov, V.V.

Title : The Analysis of the Morphological Properties of the Aphid Populations as a Method of Short-Term Prediction of their Number.

Orig Pub : Zh. Obshch. biologii, 1956, 17, No 5, 377-385

Abstract : Practically all species of aphids in the imago stage appear in nature in the alate as well as in the wing-less state. The appearance of the alate forms is stimulated by the deterioration of conditions. The presence of the wing beginnings are found in the II larval stage already. The relative number of larvae with wing beginnings is utilized by the author for the prognostication of the subsequent lowering or increase in the number of aphids, based on the ability of the alate aphids to migrate from the focus of their birth. The lower the percentage of

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USSR/Special and General Zoology - Insects.

0-3

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 69818

larvae with wing growths, the greater is the increase of the aphid population in the nearest 7-10 days. It is shown in relation to the acacia (white acacia), melon and acacia (on the cotton-plant) aphids, that if in the colony of aphids the percentage of alate larvae does not exceed 25-30, then within the next few days there will be an increase in population. With 30-40 percent the population remains stationary, and at 60 and above there is a rapid decline in the acacia aphid within 7-10 days, and of the melon aphid within 10-16 days. For the prognosis it is sufficient to collect 1000 larvae from no less than 50 different points of the observed field. The enemies and parasites of aphids cannot have a decisive influence on the number of aphids, for their quantity depends on the quantity of aphids. The proposed method of prognosis is more precise and convenient than the analysis of fertility by the embryonic count in the ovaries of

Card 2/3

- 26 -

USSR/Special and General Zoology - Insects.

0-3

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 69818

the females.

The author believes that the lowering in the number of aphids is produced to larger extent by the flight of the winged forms, than by the lowering in fertility.

Card 3/3

- 27 -

YAKHONTOV, V. V.

USSR / General and Special Zoology. Insects

P

Abs Jour: Ref Zhur-Biol., No 1, 1958, 2155

Author : V. V. Yakhontov

Inst :

Title : Two New Species and One New Variation of the Thrips
(Thysanoptera) from Northern Karakum and from the
Middle Course of the Ili River.

Orig Pub: Entomol. Obozreniye, 1956, 35, No 1, 144-147

Abstract: The following are described: a new variety of thrips
Liothrips dampfi Karny var. *karakumensis*, collected
from the branches of *Tamarix*; new species *Haplothrips*
ammodendronis collected from the flowers of sand
acacia *Ammodendron connollyi* as well as *H. arthropylti*
collected from the black *Haloxylon Arthropytum aphyll-*
um.

Card 1/1

YAKHONTOV, V.V.

New genus and species of thrips from the Trans-Ili Ala-Tau [with
English summary in insert]. Zool.zhur. 35 no.4:554-555 Ap '56.
(MLBA 9:8)

1. Uzbekistanskoye otdeleniye Vsesoyuznogo entomologicheskogo ob-
shchestva.

(Trans-Ili Ala-Tau--Thrips)

YAKHONTOV, V. V.
ALIMOV, R.A., red.; YEREMENKO, V.Ye., red.; ZAKIROV, K.Z., akademik, red.;
KANASH, S.S., akademik, red.; MUKHAMEDZHANOV, M.V., akademik, red.;
NABIYEV, M.N., akademik, red.; RYZHOV, S.N., red.; SADYKOV, S.S., red.;
YAKHONTOV, V. V., red.; BUGAYEV, V.A., kand.fiz.-mat.nauk, otvetstvennyy
red.; PANKOV, M.A., prof., doktor sel'skokhozyaystvennykh nauk,
otvetstvennyy red.; KURANOVA, L.I., red. izd-va; GOR'KOVAYA, Z.P.,
tekhn.red.

[The cotton plant] Khlopchatnik. Tashkent. Vol.2. [Climate and
soils in cotton growing regions of Central Asia] Klimat i pochvy
khlopkovykh raionov Srednei Azii. 1957. 626 p. (MIRA 11:1)

1. Chlen-korrespondent AN UzSSR (for Alimov, Yermenko, Sadykov,
Yakhontov). 2. Deystvitel'nyy chlen Akademii sel'skokhozyaystvennykh
nauk UzSSR (for Yermenko, Mukhamedzhanov, Ryzhov). 3. AN UzSSR
(for Zakirov, Kanash, Mukhamedzhanov, Nabiyeu). 4. Vsesoyuznaya
akademiya sel'skokhozyaystvennykh nauk im. V.I. Lenina (for Kanash,
Ryzhov). 5. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut
matematiki i mekhaniki.

(Soviet Central Asia--Soils) (Soviet Central Asia--Climate)
(Cotton)

USSR/General and Specialized Zoology - Insects.

P.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 40045

Author : Yakhontov, V.V.

Inst :

Title : Now in the Biological Method.

Orig Pub : Zashchita rast. v biologicheskoy metode. 1957, No 3, 32-33.

Abstract : The crossing of varieties of the stethorus beetle, the most dangerous natural enemy of the cobweb ticks, was accompanied by heterosis. In the stethorus and the seven-spotted ladybugs, Heterosis expressed itself in a sharp increase in fertility and voracity in all variants of the experiment. The fertility of the generation of the ladybugs that hibernated, increased after crossing by 21.6-136%, and the fertility of the subsequent (summer) generation increased by 33.4-118%. The stethorus fertility was increased correspondingly by 10-43% and by 50.3-65.6%. The voracity of the hybrid offspring of the seven-spotted

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USSR/General and Specialized Zoology - Insects.

P.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 40045

ladybug increased by 7.6-47.3%. Heterosis began to be weaker since the third hatching, but even in the fourth hatching the hybrid offspring was more fertile than in the varieties that were non-hybrid. Very close kinship crossing of the stethorus and of the ladybug was accompanied with degeneration expressing itself in a decrease of fertility in the stethorus by 7.3-20.5% and in the ladybug by 11.1-88.8%. Evil effects of inbreeding were removed by cross breeding of inbred beetles with beetles collected in the field. Most beneficial for heterosis of the ladybug was crossing the individual bugs with bugs obtained from warmer climates. The increase in vitality of entomophagi at their crossing was regarded as a theoretical basis for the development and practical application of the new biological trend and for the use of entomophagi by the method of intraareal distribution and exportation in the "white spots" of the area. Such a method was more economical and involved less of a risk of extinction. -- I.A. Rubtsov.

Card 2/2

YAKHONTOV, V.V.

Development of entomological research in Uzbekistan. Izv. AN Uz.
SSR. Ser. biol. nauk no.4:41-49 '57. (MIRA 11:9
(Uzbekistan--Entomological research)

USSR / General and Specialized Zoology. Insects. Pests of Food
Stuffs. P

Abs Jour : Ref Zhur - Biologiya, No 16, 1958, No. 73672

Author : Yakhontov, V. V.

Inst : Not given

Title : Survey of Reports on Granary and Storehouse Pests at
the Tenth International Entomological Congress

Orig Pub : Zashchita rast. ot vredit. i bolezney, 1957, No 4,
49-50

Abstract : In order to reveal the stages of the pest inside grains,
samples are reduced to fragments or boiled in alkalis,
but the most effective method is treatment with roentgen
rays using beryllium tubes. The possibility of calcu-
lation by using neon-oscillators IK-radiation, starting
on the basis of the metabolism of the pest inside the
grain, was studied. The grain-spectroscope is used to

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Stuffs.

Abs Jour : Ref Zhur - Biologiya, No 16, 1958, No. 73672

pick out the grain with inside damage. The following are also used: methyl bromide - the basic fumigant in the USA; a mixture of CS_2 and CCl_4 (1:4); acrirolon; HCN; acrylonitrile with CCl_4 (for disinfection of tobacco and articles from it); and ethyloxide + Carbon acid. DDT, methoxichlore, and dieldrin are used to control the rice weevil in seed grains. The grain is aerated to secure the circulation of fumigants throughout a large mass of grain. The T/C Gas-analyzer permits the determination of the concentration of gas during fumigation. The use of X-rays of the radioactive isotopes, roentgen rays, electronic radiation, radio-waves, and ultrasonic vibration is planned. An electronic amplifier enables one to hear the pests. To protect grain from being attacked by pests pyrenon and other preparations of pyrethrine + piperonilbutoxide are used.

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YAKHONTOV, V.V., prof.

"Agricultural entomology" by Vasil Iv. Popov.

Reviewed by V.V. Iakhontov. Zashch. rast. ot vred. 1, bcl. 2
no. 6:63 N-D '57. (MIRA 16:1)

(Insects, Injurious and beneficial) (Popov, Vasil Iv.)

USSR/General and Systematic Zoology. Insects. Harmful
Insects and Acardis. Fodder Pests.

P

Abs Jour : Ref Zhur - Biol., No 3, 1959, No 11610

Author : Yakhontov V.V.
Inst : Tashkent Agricultural Institute
Title : Arthropodocenosis of an Alfalfa Field in the
Northern Region of Uzbekistan. Order of Hemiptera.

Orig Pub : Tr. Tashkentsk. s.-kh. in-t, 1957, 8, 57-64

Abstract : According to systematic calculations (by means of
mowing) in the environs of Tashkent in 1937-1938,
the fauna of the alfalfa-field hemiptera numbers
32 species, only 11 of which are found in consider-
able quantities. The species most frequently en-
countered are the predators Nabis ferus and Cam-
ptobrochis punctulatus (the former feeds on various
insects; the latter, apparently, on aphids). Of

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USSR/General and Systematic Zoology. Insects. Harmful In- P
sects and Acardis. Fodder Pests.

Abs Jour : Ref Zhur - Biol., No 3, 1959, No 11610

the plant-eating bugs, the most abundant is *Trigonotylus ruficornis*, which appears in large numbers on alfalfa only in the end of summer, when the clover grasses, on which it fed hitherto, had died out. Of the species harming alfalfa directly, alfalfa (*Adelphocoris lineolatus*) and field (*Lygus pratensis*) bugs predominate, the latter having been encountered on some fields in greater numbers than the former. Comparing the results, obtained by means of mowing and gathering on experimental areas, the author considers mowing to be the more effective method, because it reveals more completely the species composition. -- G.A. Viktorov

Card : 1/2

YAKHONTOV, V. V.
USSR / General and Special Zoology. Insects. System- P
atics and Faunistics.

Abs Jour: Ref Zhur-Biol., No 21, 1958, 96378.

Author : Yakhontov, V. V.; Gurbanov, H. H.

Inst : AS AzorbSSR.

Title : Norashon Thrips - A New Form of Thrips Franklin-
iella intonsa.

Orig Pub: Dokl. AN AzorbSSR, 1957, 13, No 12, 1279-1283.

Abstract: Systematic description and notes on distribution,
biology and intraspecies changes of the thrips
F. intonsa.

Card 1/1

YAKHONTOV, V.V.

The new species of thrips (Thysanoptera) injurious to *Ulmus pinnato-*
ramosa in Kazakhstan [with summary in English]. Zool. zhur. 36 no.6:
943-949 Je '57. (MLRA 10:8)

1. Uzbekistanskoye otdeleniye Vsesoyuznogo entomologicheskogo
obshchestva.

(Kazakhstan--Thysanoptera) (Elm--Diseases and pests)